

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~[[The]]~~ A motherboard comprising:
a chipset for managing data transfers within the motherboard;
a scalable interconnect connecting to said motherboard; and
a plurality of high-speed video card slots connected to said interconnect.
2. (Original) The motherboard of claim 1, further comprising a switch connected to said interconnect, wherein said switch distributes bandwidth from said interconnect to said plurality of high-speed video card slots.
3. (Original) The motherboard of claim 2, wherein said interconnect comprises a x16 connection, and wherein said switch distributes bandwidth from said x16 connection to two x16 video card slots.
4. (Original) The motherboard of claim 1, wherein said interconnect comprises at least a x32 connection.
5. (Original) The motherboard of claim 4, wherein said interconnect is divided into two or more x16 connections between the chipset and the plurality of high-speed video card slots.

6. (Original) The motherboard of claim 1, wherein said interconnect comprises at least a x16 connection, and wherein said interconnect is divided into a x8 connection between the chipset and each of said plurality of high-speed video card slots.

7. (Original) The motherboard of claim 1, wherein said interconnect comprises a connection having at least 24 lanes, and wherein said interconnect is divided into a x8 connection between the chipset and one of said plurality of high-speed video card slots and a x16 connection between the chipset and another of said plurality of high-speed video card slots.

8. (Original) The motherboard of claim 1, wherein a display area is divided into separate sections, one or more graphics processing units (GPUs) are dedicated to graphics processing related to each of the display sections; and said GPUs are connected to said high-speed video card slots.

9. (Currently Amended) A method for coupling two or more graphics controllers to a motherboard, the method comprising the steps of:

providing a scalable interconnect for handling data transfers on said motherboard;

dividing said scalable interconnect into multiple high-speed connections; and

routing **two or more** [[each]] of said high speed connections to [[a]] separate video slots,

whereby each of said graphics controllers is connected to one of said video slots.

10. (Original) The method of claim 9, wherein said interconnect comprises at least a x16 connection and each of said high-speed connections comprises at least a x8 connection.
11. (Original) The method of claim 9, wherein a switch is connected to said interconnect, said switch distributing data transfers between said interconnect and said high speed connections.
12. (Original) The method of claim 11, wherein said interconnect comprises a x16 connection, and wherein each of said video slots is a x16 video card slot.
13. (Original) The method of claim 9, wherein said interconnect comprises at least a x32 connection.
14. (Original) The method of claim 13, wherein each of said high-speed connections comprises at least a x16 connection.
15. (Original) The method of claim 9, wherein, wherein said interconnect comprises at least a x24 connection, and wherein one of said high-speed connections comprises at least a x8 connection and another of said high-speed connections comprises at least a x16 connection.
16. (Original) The method of claim 9, wherein:
a display area is divided into separate sections, and
one or more GPUs on said graphics controllers are dedicated to graphics processing related to each of the display sections.

17. (Original) The method of claim 9, wherein said method is agnostic to a specific chipset.
18. (Original) A computer comprising
a motherboard having multiple high-speed expansion slots, each of said slots being capable of at least a x8 connection; and
multiple graphics controllers, each connected to a separate expansion slot.
19. (Original) The computer of claim 18, wherein each of said slots is capable of at least a x16 connection.
20. (Original) The computer of claim 18, wherein one of said slots is capable of a x8 connection and another of said slots is capable of a x16 connection.
21. (Original) The computer of claim 18, wherein said motherboard further comprising a switch, said switch distributing data transfers to and from two or more of said high-speed expansion slots.
22. (Original) The computer of claim 21, wherein said interconnect comprises a x16 connection, and wherein each of said expansion slots is x16.

23. (Original) The computer of claim 18, wherein a display area is divided into separate sections and one or more graphics processing units (GPUs) on said graphics controllers is dedicated to graphics processing related to each of the display sections.

24. (Original) A device for coupling two or more graphics controllers to a motherboard, the device comprising:

a scalable interconnecting means for handling data transfers on said motherboard;

a dividing means for separating data transfers from said scalable interconnecting means to multiple high-speed connecting means; and

a routing means for connecting each of said high speed connections to a separate slotting means, wherein each of said graphics controllers is connected to one of said slotting means.

25. (Original) The device of claim 24, wherein said interconnecting means comprises a x16 connection, and wherein each of said high-speed connecting means comprises a x8 connection.

26. (Original) The device of claim 24, wherein said interconnecting means comprises a x32 connection, and wherein each of said high-speed connecting means comprises a x16 connection.

27. (Original) The device of claim 24, wherein said interconnecting means comprises a x24 connection, wherein one of said high-speed connecting means comprises a x8 connection, and wherein another of said high-speed connecting means comprises a x16 connection,

28. (Original) The method of claim 24 wherein said dividing means comprising a switching means for distributing data transfers between said interconnecting means and said high speed connecting means, wherein said interconnecting means comprises a x16 connection, and wherein each of said high-speed connecting means comprises a x16 connection.

29. (New) The motherboard of claim 1, wherein the video card slots comprise a first video card slot and a second video card slot, the interconnect comprising a first x16 connection to the first video card slot and a second smaller-scaled connection to the to the second video card slot.

30. (New) The motherboard of claim 29, wherein the second connection is at least one of a x1, x2, x4, and x8 connection.

31. (New) The motherboard of claim 1, wherein the first video card slot and the first video card slot have first prespecified dimensions.

32. (New) The motherboard of claim 31, further comprising a peripheral slot connected to the interconnect, the peripheral slot having second prespecified dimensions, wherein the second dimensions differs from the first dimensions.

33. (New) The motherboard of claim 31, wherein the first dimensions of the video card slots are selected to allow a graphics card to be coupled to any of the video card slots.

34. (New) The motherboard of claim 33, wherein the graphics card is designed to be used with a x16 connection.

35. (New) The method of claim 9, wherein the high-speed connections comprise a first connection and a second connection, each of the first connection and the second connection being routed one of the video card slots, wherein the second connection is smaller than or equal to in scale than the first connection.

36. (New) The method of claim 35, wherein the second connection is at least one of a x1, x2, x4, and x8 connection.

37. (New) The method of claim 9, wherein each of the graphics controllers is configured to be used with a x16 connection.

38. (New) The method of claim 9, further comprising the steps of:
further dividing the scalable interconnect into a low-speed connection, and
routing the low speed connection to a peripheral slot, wherein the peripheral slot has different dimensions from the video slots.

39. (New) The computer of claim 18, wherein the interconnect comprises a first connection and a second connection to the expansion slots, wherein the first connection is a x16 connection, and wherein the second connection is smaller than or equal to in scale to the first connection.

40. (New) The computer of claim 18, wherein each of the graphics controllers is configured to be used with a x16 connection.
41. (New) A motherboard for supporting multiple video cards, the motherboard comprising:
- a processor socket adapted to receive a central processing unit (CPU);
 - a scalable interconnect that provides data paths to the processor socket, wherein the scalable interconnect is selectively divided as needed to allocate the data paths; and
 - video card slots connected to the interconnect, wherein each of the video card slots is specifically adapted for coupling to a graphics card.
42. (New) The motherboard of claim 41, wherein the video card slots have substantially similar dimensions.
43. (New) The motherboard of claim 42, wherein multiple similar graphics cards can be coupled to the motherboard.
44. (New) The motherboard of claim 43, wherein each of the video card slots is configured to couple with a graphics card designed to be used with a x16 connection.
45. (New) The motherboard of claim 41, wherein the interconnect comprises a first data path and a second data path, each of the first and second data paths connecting the processor

socket to different video card slots, the first data path being equal to or larger in scale than the second data path.

46. (New) The motherboard of claim 45, wherein the second data path comprises at least one of a x1, x2, x4, and x8 connection.

47. (New) The motherboard of claim 41, further comprising a peripheral slot connected to the interconnect, the peripheral slot having different dimensions from the video card slots.

48. (New) A high performance computer comprising:
a motherboard including a processor socket adapted to receive the central processing unit (CPU), a scalable interconnect that provides data paths to the CPU, wherein the scalable interconnect is selectively divided as needed to allocate the data paths, and a first and a second video slots, wherein the first and the second video slots connect to one or more of the data paths, the first and the second video slots video slots have a substantially similar physical configuration, wherein the video slot physical configuration is selected to allow the first and the second video slots video slots to accept a graphics card; and
a first graphics card coupled to the first video slot.

49. (New) The high performance computer of claim 48, further comprising a second graphics card coupled to the second video slot.